

Environmental Management Performance Report

November 2002



E0212049



Department of Energy
Richland Operations Office



Bechtel Hanford, Inc.
Environmental Restoration Contractor

Data as of month-end November

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
NOVEMBER 2002**

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**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
NOVEMBER 2002**

INTRODUCTION

The monthly Environmental Restoration (ER) Environmental Management Performance Report (EMPR) consists of two sections: Section A - Executive Summary, and Section B – River Corridor Restoration. All data are current as of November 30, 2002, unless otherwise noted.

Section A – Executive Summary. The Executive Summary begins with a description of notable accomplishments for the current reporting month that are considered to have made the greatest contribution toward safe, timely, and cost-effective Hanford Site cleanup. Safety statistics are also included. Major commitments are summarized that encompass Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestones. Fiscal year 2003 (FY03) performance objectives and status are provided. Fiscal year-to-date ER Project cost and schedule variance analysis is summarized. Issues that require management and/or regulator attention are addressed along with resolution status. The Key Integration Activities section highlights site activities that cross contractor boundaries, supporting overall Hanford Site goals. The Executive Summary ends with a listing of major upcoming planned key events (90-day look ahead).

Section B – River Corridor Restoration. This section contains more detailed Environmental Restoration Contractor (ERC) monthly activity information and performance status for the three Project Baseline Summaries (PBSs) within the River Corridor Restoration outcome. These three PBSs consist of RC01 - 100 Area River Corridor Cleanup, RC02 - 300 Area Cleanup, and RC05 - River Corridor Waste Management.

PBS SC01 - Near-Term Stewardship is structured within the Site Stewardship outcome. Due to the minimal FY03 workscope identified for this PBS, SC01 performance data is included in the Executive Summary cost/schedule overview.

Performance Incentive and Safety information in this report is identified with a green, yellow, or red text box used as an indicator of the overall status. Green indicates work or issue resolution is satisfactory and generally meets or exceeds requirements, yellow indicates that significant improvement is required, and red indicates unsatisfactory conditions that require immediate corrective actions.

Section A - Executive Summary



Loading ERDF Container at Lewis Canal (100 F Area)



Pumping Grout at ERDF to Macroencapsulate 18 Bags of Elemental Lead from 300 Area



IPIX Virtual Tour Composite Shot - Front Face Work Area C Reactor



Completing H Reactor FSB Sampling Using the Brokk™

Data as of month-end November

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SECTION A – EXECUTIVE SUMMARY

Data as of month-end November

NOTABLE ACCOMPLISHMENTS

River Corridor Restoration:

Mobilization activities continued in the 100 K Area. Remediation activities are scheduled to begin in mid-December.

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Cultural Commission conducted a tour of the 100 K Area remediation area, including the known cemetery that is located in this immediate area.

An exploratory pothole was completed to search for evidence of the 118-B-2 Burial Ground. Ground-penetrating radar (GPR) data showed no evidence of any buried material in the area, and the pothole information confirmed that data.

Variance sampling was completed for three waste sites and one partial site in the 100 F Area during November.

The 300 Area Kd/leach study was completed, and the final report was issued.

During November, 46,609 metric tons (51,378 tons) of contaminated waste were disposed in the Environmental Restoration Disposal Facility (ERDF), for a total of 100,099 metric tons (110,341 tons) disposed to date in FY03. A total of 3,563,742 metric tons (3,928,374 tons) of waste have been disposed in ERDF since operations began in July 1996.

Shipment of the F Reactor fuel storage basin (FSB) demolition debris was completed on November 13. This action met the performance incentive to complete demolition and dispose of the FSB waste by November 20.

Waste designation sampling of the H Reactor FSB lower fill/sludge was completed on November 11.

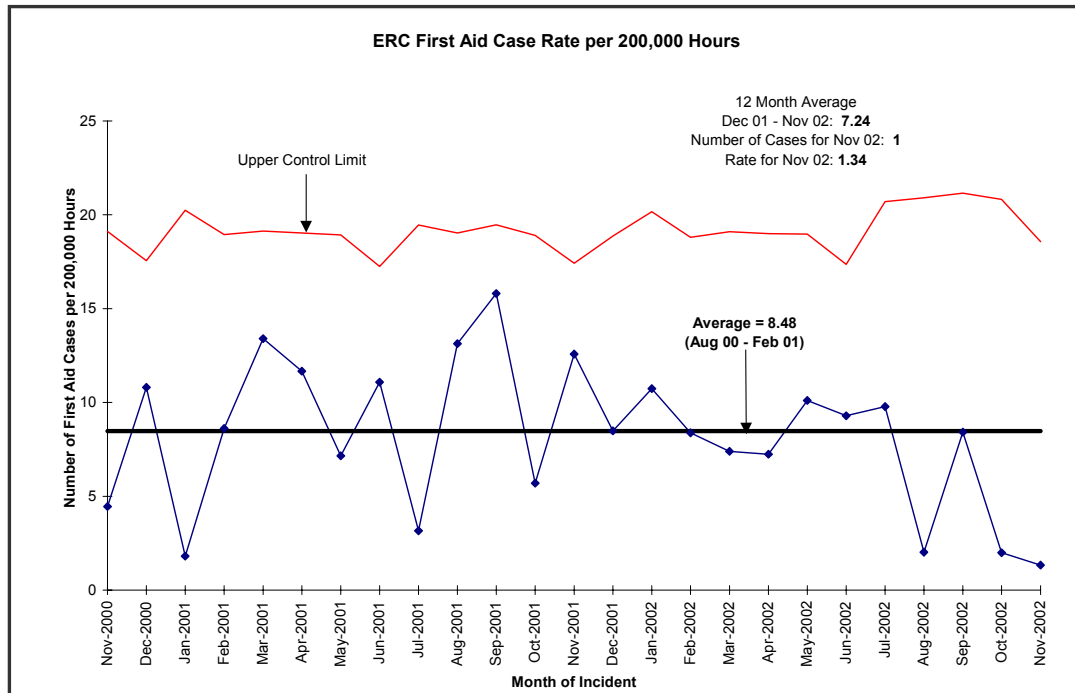
Surveillance and Maintenance personnel completed B Reactor hazard mitigation repairs to Hallway 227B and installed new window panels in the FSB viewing room. The first ERC deployment of the IPIX virtual tour camera for C Reactor surveillance was also completed.

ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

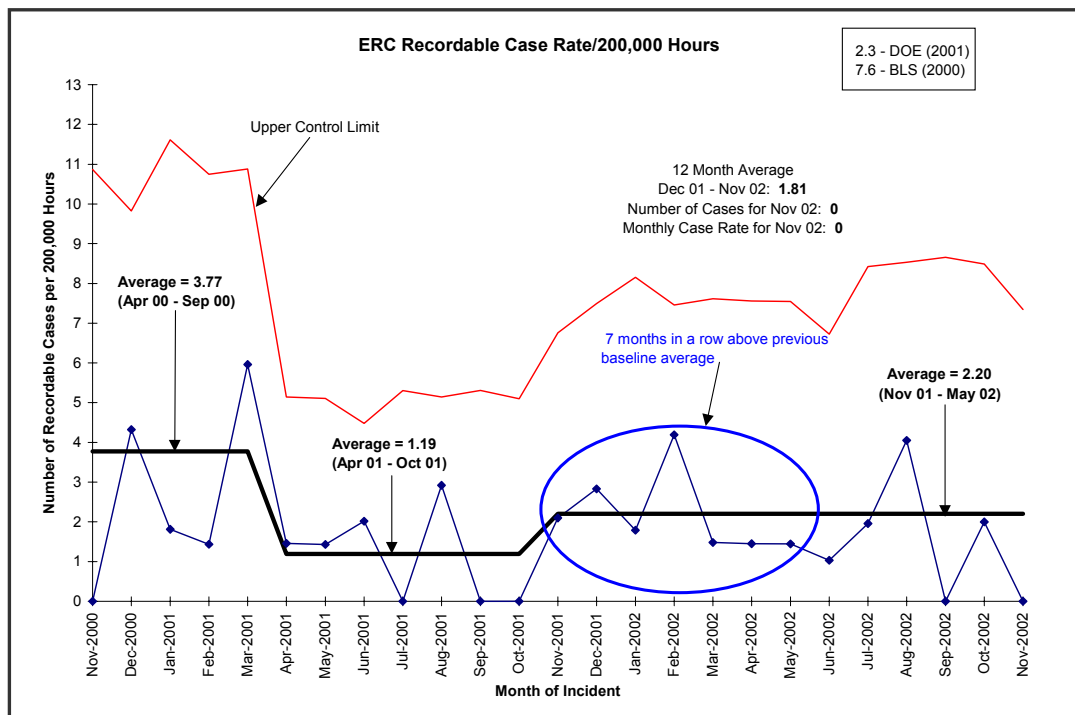
ENVIRONMENTAL RESTORATION

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SAFETY



NOTE: This data has been stable since August 2000.



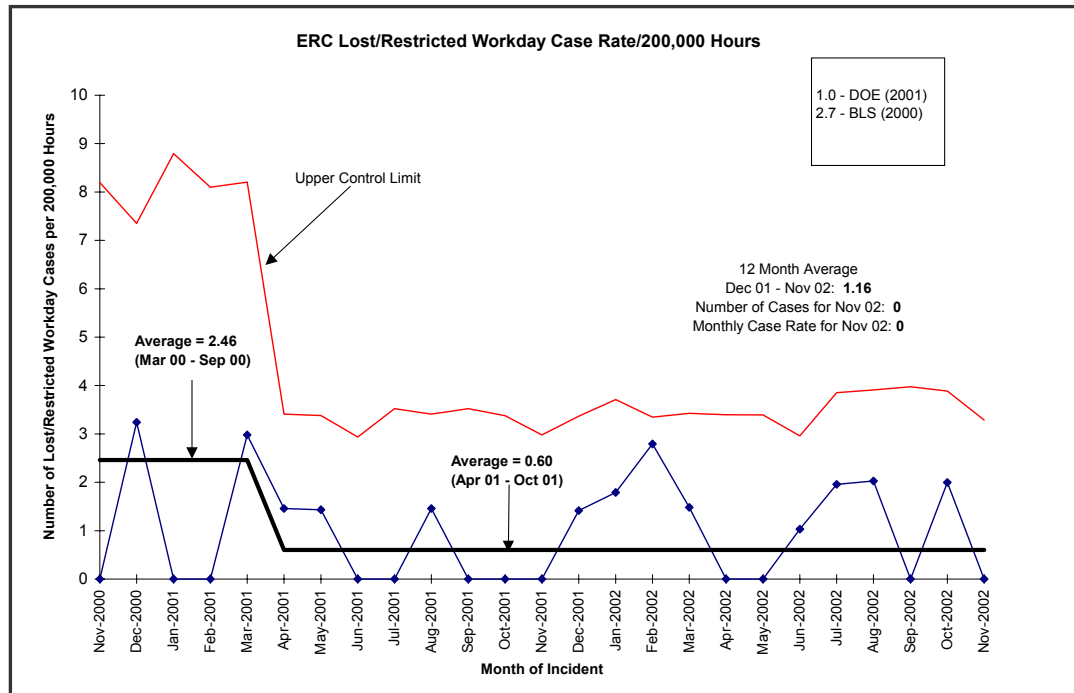
NOTE: This data has been stable since November 2001.

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ENVIRONMENTAL RESTORATION

NOVEMBER 2002

SAFETY (continued)



NOTE: This data has been stable since April 2001.

Safety:

The following actions have or are being taken by the Environmental Restoration Contractor (ERC) to focus on safety improvements:

- Activities were initiated to obtain Voluntary Protection Program (VPP) Star Status recognition.
- The Subcontract Technical Representatives (STR) implemented the use of a "Performance Review Form". This form is used to document subcontractor performance, safety, and contractual compliance.
- A new Control of Hazardous Energy and Materials (Lockout/Tagout) training course was developed and implemented. The training consists of ten separate modules that can be administered commensurate with an individual's responsibilities.
- All incidents are thoroughly investigated. Emphasis is placed on causes and corrective actions that can be implemented where applicable. Timely discussions take place in safety meetings and plan of the day (POD) meetings. When investigations are complete, the results are sent to the Area Superintendents, Field Superintendents, and Supervisors for review at the PODs.
- Bechtel Hanford, Inc. (BHI) continues to look for trends and consults with Corporate and other Bechtel National, Inc. (BNI) contacts for ways to enhance performance.
- The ERC continues to work closely with the Hanford Atomic Metal Trades Council (HAMTC) Safety Representative to resolve safety issues as they arise.

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SAFETY (continued)

- Senior management continues to meet with small groups of employees in the field to discuss safety and personal commitment to safety.
- The Field Support General Superintendent and Project Safety Manager continue to visit different projects on a regular basis, meet with project team members, and conduct safety walkarounds. Area Superintendents for Decontamination and Decommissioning projects and Surveillance and Maintenance projects are included in these walkarounds. The walkaround participants visit projects other than those for which they are responsible. Information from the walkarounds is shared with the team and other Field Support personnel. Safety conditions requiring corrective action are assigned to project personnel or support personnel for action and are tracked to closure. This activity is ongoing.
- The ERC previously recognized a trend in sprain and strain injuries. Heightened awareness regarding proper lifting techniques, the use of mechanical devices for lifting heavy or awkward loads, proper planning, and increased participation in low-impact stretching exercises prior to engaging in lifting or pulling activities are being utilized to reduce these types of injuries.
- The ERC has invited "Brown Bag Speakers" to join employees during lunchtime at the 3350 George Washington Way facility to discuss various safety and health topics.
- Field Support personnel conduct weekly safety inspections. Findings are entered into a database and tracked to closure. Daily inspections are also performed and logged in the project's daily logbook or daily report.
- The Reactor Interim Safe Storage (ISS) project developed and is implementing a new, regulator-approved, waste handling/characterization process for removal of the lower fill material in the H Reactor FSB. This action will significantly reduce the number of heavy equipment and worker interfaces that occur during the operation and also implements a significant lessons learned from the F Reactor FSB work.

| | FYTD | Current Period (10/14/02- 11/24/02) | Current Period Comments |
|--------------------------------|-------------|--|--------------------------------|
| First Aid | 2 | 1 | (1) strain |
| OSHA Recordable | 1 | 0 | |
| Restricted Workday Case | 1 | 0 | |
| Lost Workday Case | 0 | 0 | |

Status:

- As of November 30, 2002, the ERC had worked approximately 304,000 hours without a lost workday case. The last incident occurred on June 4, 2002 and became lost time on September 4, 2002. Continuous employee involvement is being fostered by the Integrated Environmental Safety and Health Management System (ISMS), VPP, labor alliance programs, e-mail communications, and one-on-one meetings with employees.
- The ERC experienced no work-related injuries or illnesses for three of the four weeks in November.

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SAFETY (continued)

- The draft ERC VPP self-assessment report is being reviewed by the VPP Steering Committee to ensure the assessment aligns with the U.S. Department of Energy (DOE) VPP criteria. The report will be available for management review in mid December.
- To date, the ERC has had 12 brown bag speakers. The most recent speaker was a representative from the Richland Fire Department who spoke on "Home Safety and Fire Prevention."
- The ERC "Safety Body" identified the greatest percentage of injuries are to the hand and finger areas. Emphasis has been placed on raising awareness during discussions at staff meetings, morning PODs, and a recent article prepared for the "Safety Speaking" on hand and finger safety.
- The ERC continues to work diligently to provide accurate and timely reporting of occurrences, and to conduct followup fact-finding critiques to identify problems and improve safe field operations.
- The ERC will initiate improvement opportunities to assist employees with hazard recognition and control of confined spaces. These improvement opportunities include reviewing confined space training, comparing the existing BHI confined space procedure to the Bechtel Corporate procedure to assist in developing a hazard recognition training and education module that will be presented to appropriate project personnel. This module will look at hazards such as fall protection, lock and tag, confined spaces, and hoisting and rigging.

Integrated Environmental Safety and Health Management System (ISMS):

Improvements required to meet fire safety codes recently issued for continued occupancy of B Reactor were examined during a building walkdown on November 12. The improvements do not affect the appearance of the facility or impact historic materials. All are exempt from further review under the "personnel safety" provisions of the National Historic Preservation Act (NHPA).

The first of two new procedures implementing the new site-wide transportation safety document has been issued for internal peer review. Additionally, four employees have attended the first in a series of classes required to become trained unreviewed safety question (USQ) evaluators.

Data continued to be added to the 300 Area infrastructure data set, and creating hardcopy maps of the data. The data consists of all the point-type infrastructure data found in the 300 Area such as poles, manholes, and water valves, etc. The data were created last summer by field mapping, and is being transferred to digital geographic information system (GIS) mapping. Some research is required for attributes with no information, by comparing old 300 Area specific drawings of the mapped features. Field verification of the data is underway. This consists of double checking the previous mapped data to confirm accuracy and to ensure nothing was missed.

The chemical custodians completed chemical inventory updates for the fourth quarter (CY02). The chemical inventory database (CID) was completed in November to support preparation of the Emergency Planning Community Right to Know Act of 1986 (EPCRA) Tier Two Reports.

An independent assessment was completed for cold weather protection.

An independent assessment was conducted for waste management activities at a 90-day accumulation area, satellite accumulation areas (SAAs), and a recycle accumulation area.

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SAFETY (continued)

Procedure BHI-MA-02, 2.22, "Graded Approach", was issued in response to a DOE Richland Operations Office (RL) comment on the Quality Assurance Plan (BHI-QA-01) annual update.

BHI continued toward full implementation of the ISMS Performance Objectives, Measures, and Indicators Process (hereafter referred to as metrics) that BHI communicated to RL in document BHI-01550. Data collection continues, and new November data for all metrics requiring monthly reporting were provided to RL by letter.

BHI completed the internal review of the ISMS Metrics Process document and the review of metric definitions to ensure metric quality. The final draft of the process document was completed and will be transmitted to RL in December.

Other accomplishments on this effort during November included:

- BHI continued to work on the items from the action plan reported in September, which captured the tasks to be completed to achieve the institutionalization goal. The plan includes some 515 items that range from establishing a BHI Management Metric Review Committee to providing additional training for both RL and BHI personnel that use the ISMS metrics processes and data.
- BHI completed and refined the crosswalk document that showed similarities in two different metric data reports that are provided to RL. The purpose of the crosswalk was to justify the elimination of one of the reports to improve efficiency. The crosswalk showed that all the data in the smaller report was also contained in the larger report. A meeting was held with RL to discuss the BHI proposal. RL agreed to the proposal. A letter documenting the agreement to discontinue this duplicate reporting will be transmitted to RL in December.

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PROCESS IMPROVEMENTS

Six Sigma:

- Continued with the implementation of the Six Sigma program across the ERC.
- Continued the development of a top-down approach for Six Sigma and developed process flows for Level 1 and Level 2 processes. Generated an Input/Output matrix showing the major products generated by each step.
- Completed BHI Master Champion training required for certification.
- Established a tentative schedule for the Yellow Belt Summit and Report Out for newly-trained BHI and RL Yellow Belts for the end of January 2003.
- Conducted Champion training November 5-7. Champions were trained from BHI, Idaho National Engineering and Environmental Laboratory (INEEL), Waste Treatment Project (WTP), and National Missile Defense.

Process Improvement Projects (PIPs) and status include:

- Continued to address the business case for the Remedial Action and Waste Disposal (RAWD) Container Handling PIP (PIP #11). Consistent performance targets and specification limits for each customer will be developed as a means to identify and define the business case.
- Participated in a meeting with RL Safety management and members of the RL Safety Basis Division staff to discuss the path forward for the Safety Basis PIP (PIP #8). It was agreed that the Safety Basis document preparation process should be examined from initial document development through final approval. Using 15 safety analysis documents currently in process (from other site contractors), a baseline will be established for how well the documents measure against the quality indicators of compliance, cycle time, and cost. RL Yellow Belts and the Authorization Basis division manager have an action to develop a list of metrics for these factors. BHI will provide support as needed.

MAJOR COMMITMENTS

Tri-Party Agreement Milestones: Two (2) Tri-Party Agreement milestones are planned for completion during FY03.



| Total Tri-Party Agreement Milestones Due in FY03 | 2 |
|---|----------|
| Total Planned through November | 0 |
| Total Completed through November | 0 |

| Remaining Tri-Party Agreement Milestones to be Completed in FY03 | 2 |
|---|----------|
| Forecast Ahead of Schedule | 2 |
| Forecast On Schedule | 0 |

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PERFORMANCE OBJECTIVES

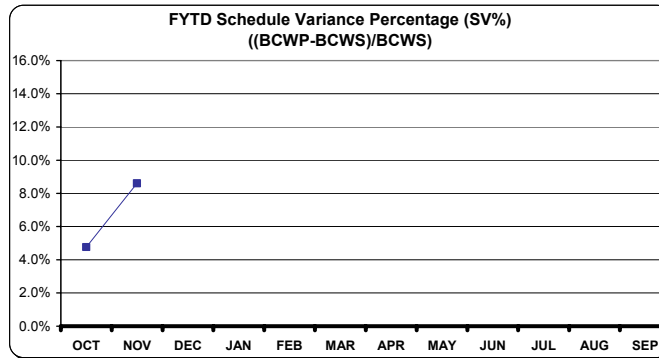
BHI focus area performance incentives are noted below. Specific River Corridor performance incentives are identified in Section B.

| | PI | Fee Allocation | Task | Status |
|---|-----------------------------------|--|---|---|
|  | Execute Detailed Work Plan | Incentive fee shall not exceed 100%; if SPI is less than 75% at end of contract period, no fee shall be awarded. | Perform to approved DWP through present contract period ending 12/31/02 in accordance with the SPI provision. | Through November, the SPI is 1.09, or 9% ahead of schedule. |
|  | Safety | Up to 50% of fee available for this PI may be forfeited if failure to satisfactorily meet PI in accordance with applicable requirements. | Protect worker safety and health, public safety and health, and the environment. | No issues or negative findings were identified with regard to the 16 performance failure criteria associated with this performance incentive. In addition, no injuries of any type have been experienced since a first-aid injury occurred on November 1. |

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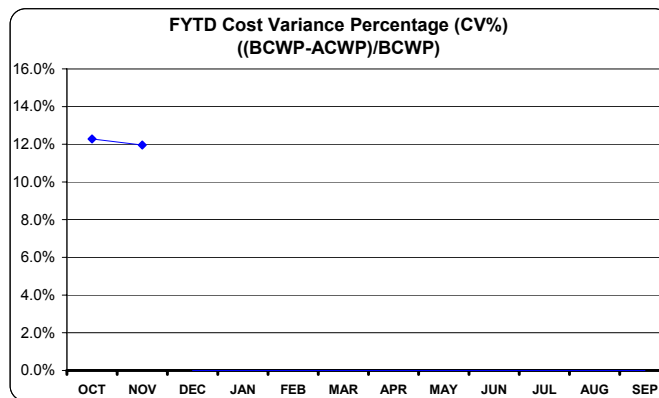
TOTAL ERC COST/SCHEDULE OVERVIEW

**FY03 ERC PERFORMANCE SUMMARY
FYTD NOVEMBER 2002
(\$K)**



***NOTE: ERC current contract completes December 31, 2002. (Contract will be extended through April 30, 2003.)**

| | OCT | NOV | *DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|----------------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| DWP | 8,451 | 8,521 | 9,154 | 8,467 | 8,304 | 10,768 | 8,608 | 8,797 | 10,797 | 8,997 | 10,602 | 9,997 |
| DWP (Accum) | 8,451 | 16,973 | 26,127 | 34,594 | 42,898 | 53,666 | 62,274 | 71,071 | 81,868 | 90,865 | 101,466 | 111,463 |
| CURRENT PERIOD | | | | | | | | | | | | |
| BCWS | 8,898 | 8,767 | 10,250 | 8,377 | 8,238 | 10,782 | 8,602 | 8,797 | 10,803 | 9,301 | 11,171 | 10,034 |
| BCWP | 9,322 | 9,863 | | | | | | | | | | |
| FISCAL YEAR TO DATE | | | | | | | | | | | | |
| BCWS | 8,898 | 17,665 | 27,915 | 36,291 | 44,529 | 55,312 | 63,913 | 72,710 | 83,513 | 92,814 | 103,985 | 114,019 |
| BCWP | 9,322 | 19,185 | | | | | | | | | | |
| SV | 424 | 1,520 | | | | | | | | | | |
| SV% | 4.8% | 8.6% | | | | | | | | | | |



| | OCT | NOV | *DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | EAC |
|----------------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| CURRENT PERIOD | | | | | | | | | | | | | |
| ACWP | 8,177 | 8,713 | | | | | | | | | | | |
| BCWP | 9,322 | 9,863 | | | | | | | | | | | |
| FISCAL YEAR TO DATE | | | | | | | | | | | | | |
| ACWP | 8,177 | 16,890 | | | | | | | | | | | |
| BCWP | 9,322 | 19,185 | | | | | | | | | | | |
| CV | 1,145 | 2,295 | | | | | | | | | | | |
| CV% | 12.3% | 12.0% | | | | | | | | | | | |
| EAC (Cumulative) | 8,177 | 16,890 | 27,934 | 36,254 | 44,627 | 55,532 | 64,315 | 73,062 | 83,630 | 92,637 | 103,414 | 112,615 | 112,615 |

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TOTAL ERC COST/SCHEDULE OVERVIEW (continued)

**FY03 ERC PBS PERFORMANCE SUMMARY
FYTD NOVEMBER 2002
(\$K)**

| | FY03 DWP BCWS | CURRENT BCWS | FYTD | | | FYTD SCHEDULE VARIANCE | | | FYTD COST VARIANCE | | | EAC |
|---------------------|------------------|-----------------|---------------|---------------|---------------|---------------------------|-------------|-------------|-----------------------|--------------|-------------|----------------|
| | | | BCWS | BCWP | ACWP | \$ | % | SPI | \$ | % | CPI | |
| RC01 | 65,900 | 67,412 | 10,846 | 10,595 | 9,761 | -251 | -2.3% | 0.98 | 834 | 7.9% | 1.09 | 66,852 |
| RC02 | 12,608 | 13,068 | 1,631 | 3,004 | 2,142 | 1,373 | 84.2% | 1.84 | 862 | 28.7% | 1.40 | 12,769 |
| RC05 | 32,855 | 33,440 | 5,182 | 5,580 | 4,983 | 398 | 7.7% | 1.08 | 597 | 10.7% | 1.12 | 32,897 |
| RCR-Subtotal | 111,363 | 113,920 | 17,659 | 19,179 | 16,886 | 1,520 | 8.6% | 1.09 | 2,293 | 12.0% | 1.14 | 112,518 |
| | | | | | | | | | | | | |
| SC01 | 100 | 99 | 6 | 6 | 4 | 0 | 0.0% | 1.00 | 2 | 33.3% | 1.50 | |
| SS-Subtotal | 100 | 99 | 6 | 6 | 4 | 0 | 0.0% | 1.00 | 2 | 33.3% | 1.50 | 97 |
| | | | | | | | | | | | | |
| ERC TOTAL | 111,463 | 114,019 | 17,665 | 19,185 | 16,890 | 1,520 | 8.6% | 1.09 | 2,295 | 12.0% | 1.14 | 112,615 |

Schedule Variance Summary:

Through November, the ER Project is \$1.5M (+8.6%) ahead of schedule. The positive schedule variance is attributed to the acceleration of the 618-5 Burial Ground remediation operations two months ahead of schedule.

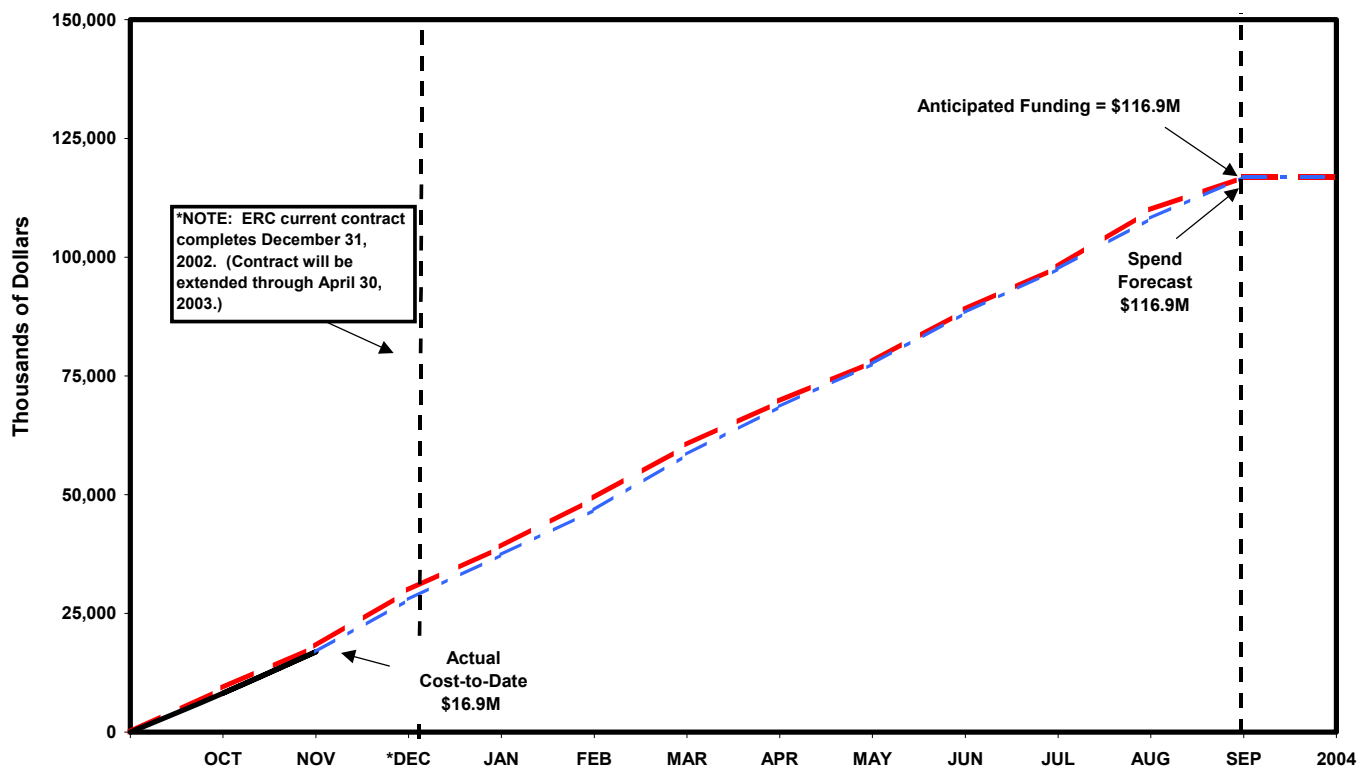
Cost Variance Summary:

At the end of November, the ER Project had performed \$19.2M worth of work, at a cost of \$16.9M. This results in a favorable cost variance of \$2.3M (+12%). The positive cost variance is attributed to overlapping the 618-4 and 618-5 Burial Ground remediation operations and savings on the F Reactor FSB floor removal.

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TOTAL ERC COST/SCHEDULE OVERVIEW (continued)

FY03 FUNDING VS. FORECAST EXPENDITURES (EAC)



| | | OCT | NOV | *DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | 2004 | |
|--|--|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|----------------|--------------|
| 1 | FY03 ERC FUNDING | 9,299 | 18,153 | 29,909 | 39,039 | 49,311 | 60,500 | 69,700 | 78,000 | 89,000 | 98,000 | 110,000 | 116,913 | Est Outyr etc. | TOTAL |
| ACTUAL/EAC ON APPROVED SCOPE | | | | | | | | | | | | | | | |
| 2 | Actual Cost Cumulative Through November | 8,177 | 16,890 | | | | | | | | | | | | |
| 3 | Current Monthly Actuals/ EACs | 8,177 | 8,713 | 11,045 | 8,320 | 8,373 | 10,905 | 8,782 | 8,746 | 10,568 | 9,007 | 10,777 | 9,202 | | |
| 4 | Cumulative Actuals/EACs on Approved Scope | 8,177 | 16,890 | 27,935 | 36,255 | 44,628 | 55,533 | 64,315 | 73,061 | 83,629 | 92,636 | 103,413 | 112,615 | | 112,615 |
| DECEMBER FY2003 APPROVED BCPs | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | 0 |
| 6 | Subtotal Approved Scope Changes | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| DECEMBER FY2003 PENDING SCOPE CHANGES | | | | | | | | | | | | | | | |
| 7 | RC01 BCP-23007 Waste Minimization for 116-F-1 Lewis Canal | | | (282) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (30) | | (312) |
| 8 | RC01 BCP-23022 116-N-1 Crib & 100-N-31 Pipeline Scope Deferral (Rebaseline) | | | (45) | 114 | 293 | (11) | (75) | (85) | (60) | (155) | (166) | 190 | | 0 |
| 9 | RC01 BCP-23X02 D Reactor Fuel Fragment Disposal | | | 40 | | | | | | | | | | | 40 |
| 10 | RC02 BCP-23005 Additional Tonnage at 618-4 Burial Ground | | | (76) | 140 | 140 | 94 | 62 | 62 | 74 | 58 | (176) | (378) | | 0 |
| 11 | RC02 BCP-23015 Additional LDR Discovery at 618-4 Burial Ground | | | 0 | 542 | | | | | | | | | | 542 |
| 12 | RC05 BCP-23023 Reduction Due To Duplicate 618-5 BG Mobilization Costs | | | (186) | | | | | | | | | | | (186) |
| 13 | RC05 BCP-23X01 Fire Loop Line Upgrade | | | 30 | 40 | | | | | | | | | | 70 |
| 14 | SS01 BCP-23X04 Implementation of the River Corridor Contract Transition (Funding Utilization Only) | | | | | 400 | 400 | 500 | | | | | | | 1300 |
| 15 | ALL BCP-23020 Inactive Site Categorization (Roberson) | | | 25 | 25 | | | | | | | | | | 50 |
| 16 | ALL BCP-23024 Decrease FY03 Performance Fee Estimate | | | (37) | (12) | (12) | (12) | 525 | (12) | (12) | (12) | (12) | (567) | | (163) |
| 17 | ALL Pending Scope Additions, Deletions, etc. | | | 531 | 269 | 270 | 270 | 269 | 270 | 270 | 270 | 269 | 269 | | 2957 |
| 18 | Subtotal Approved BCPs + Pending BCPs | | | 0 | 1118 | 1091 | 741 | 1281 | 235 | 272 | 161 | (85) | (516) | 0 | 4298 |
| 19 | Current Monthly Actuals/EACs + December FY 2003 Approved + Pending BCPs | 8,177 | 8,713 | 11,045 | 9,438 | 9,464 | 11,646 | 10,063 | 8,981 | 10,840 | 9,168 | 10,692 | 8,686 | | |
| 20 | Cumulative Actuals/EACs + December FY 2003 Approved + Pending BCPs | 8,177 | 16,890 | 27,935 | 37,373 | 46,837 | 58,483 | 68,546 | 77,527 | 88,367 | 97,535 | 108,227 | 116,913 | - | 116,913 |

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
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ISSUES (REGULATORY/EXTERNAL/DOE)

See Section B issues.

KEY INTEGRATION ACTIVITIES

See Section B key integration activities.

UPCOMING PLANNED KEY EVENTS

Tri-Party Agreement Milestone M-16-10A, Initiate Remedial Action in the 100-KR-1 Operable Unit (due August 1, 2003) scheduled for early completion in December 2002.

Tri-Party Agreement Milestone M-93-16, Complete DR Reactor Interim Safe Storage (due September 30, 2003) scheduled for early completion in January 2003.

Transition ER River Corridor workscope upon award of new contract.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
NOVEMBER 2002**

SECTION B – RIVER CORRIDOR RESTORATION

Data as of month-end November

ACCOMPLISHMENTS

100 Area River Corridor Cleanup (RC01):

Work activities in the 100 B/C Area were concentrated south of B Avenue during November, primarily on pipelines 3, 6, 25, and 26. Pipeline 3 and portions of 6 (reinforced concrete effluent pipeline from B Reactor) were removed up to the buffer zone around B Reactor. An exploratory pothole was completed to search for evidence of the 118-B-2 Burial Ground, which the Waste Information Data System (WIDS) shows partially within the excavation of pipeline 26. Ground-penetrating radar (GPR) data showed no evidence of any buried material in the area, and the pothole information confirmed that data.

In the 100 F Area, demolition and removal of the concrete apron and encasements associated with the 1.1-meter (42-inch) steel piping underneath F Avenue were completed. Overburden and contaminated soil removal continued for the deep piping south of the F Reactor FSB. Excavation of the 116-F-1 Lewis Canal continued. A baseline change proposal (BCP) was submitted to reduce the baseline quantities of 18,503 metric tons (20,396 tons) due to waste minimization accomplished at Lewis Canal. Variance sampling was completed for 116-F-1 (partial), 116-F-3 Trench, 116-F-10 French Drain, and UPR-100-F-35. Closeout samples were collected for UPR-100-F-35 and deep zone for the 116-F-6 Trench.

Mobilization of the 100 K Area construction office facility continued. The frisk tent frame installation was completed. Pre-watering sections of the 100-K-55 and 56 pipeline were initiated. The gates to the inner perimeter fence (installed due to security issues) were closed and locked. This allowed for the removal of a section of the outer security fence, which will provide access for remediation. Electrical installation activities are 85% complete. Remediation activities are scheduled to begin in mid-December. The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Cultural Commission conducted a tour of the 100 K Area remediation area, including the known cemetery that is located in this immediate area.

In the 100 N Area, excavation of plume 6 located adjacent to 116-N-1 Trench excavation was suspended due to excess water in containers. Four techniques to provide effective dust control, without resulting in excess water in containers, were tested. The use of larger absorbent-sized socks is now being employed.

A celebration to commemorate the successful completion of DR Reactor interim safe storage was held on November 1. Attendees included congressional representatives, RL, regulators, ERC management, and local officials and media.

Shipment of the F Reactor FSB demolition debris was completed on November 13. This action met the performance incentive to complete demolition and dispose of the FSB waste by November 20. Laser-Assisted Ranging and Data System (LARADS) and GPR surveys of the FSB and west side slope areas were also completed.

A spent fuel element was found in the D Reactor FSB on November 11. Notifications were made, and the fuel element was placed in a safe configuration. The current plan is to leave the element at D Reactor until H Reactor FSB demolition is completed. If any spent fuel elements are found within the H Reactor FSB, the D Reactor element can be included in the same shipment.

Waste designation sampling of the H Reactor FSB lower fill/sludge began on November 6 and was completed on November 11.

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| |
|------------------------------------|
| ACCOMPLISHMENTS (continued) |
|------------------------------------|

Several 100 Area surveillance and maintenance tasks were completed during November, including:

- Completed B Reactor hazard mitigation repairs to Hallway 227B and installed new window panels in the FSB viewing room.
- Completed the first ERC deployment of the IPIX virtual tour camera for C Reactor surveillance.
- Completed KW Reactor annual surveillance.

300 Area Cleanup (RC02):

A meeting was held with the U.S. Environmental Protection Agency (EPA) to discuss the regrading approach for the 300-FF-1 Operable Unit.

The 300 Area Kd/leach study was completed, and the final report was issued. The study results were incorporated into a draft BHI report, which is currently in review. The draft BHI report establishes a cleanup standard for uranium at 300 Area waste sites that is protective of groundwater. The report also compares previous remediation of 300-FF-1 waste sites to the new cleanup standard. All the 300-FF-1 waste sites are protective per the new standard except for a portion of the North Process Pond where a site-specific leach test is needed to make that determination.

River Corridor Waste Management (RC05):

In accordance with land disposal restriction (LDR) requirements, ERDF performed a large macro-encapsulation of approximately 145 metric tons (160 tons) of elemental lead waste from the 300 Area, along with other miscellaneous wastes. K Basin wooden boxes and F Reactor conex boxes encircled the wastes and acted as forms for the 121-cubic-meter (158-cubic-yard) grout pour.

The ERDF Disposal team has worked 79 months (since project inception) without a lost time accident.

During November, 46,609 metric tons (51,378 tons) of contaminated waste were disposed in ERDF, for a total of 100,099 metric tons (110,341 tons) disposed to date in FY03. A total of 3,563,742 metric tons (3,928,374 tons) of waste have been disposed in ERDF since operations began in July 1996.

General:

On November 18, RL forwarded the "Request for Authorized Limits for Select Radionuclides" to DOE Headquarters (HQ) with a recommendation for approval. When HQ approves these authorized limits, the ERC will be able to dramatically improve the efficiency of radiological release processes at affected sites.

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MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS)

| TPA Milestone | Description | Due Date | (F)/(A) Date |
|----------------------|---|-----------------|---------------------|
| M-16-10A | Initiate Remedial Action in the 100-KR-1 Operable Unit | 08/01/03 | 12/10/02 (F) |
| M-93-16 | Complete 105-DR Reactor Interim Safe Storage | 09/30/03 | 01/31/03 (F) |
| M-16-63 | Submit a Schedule and TPA Milestones to Complete Interim Remedial Actions for the Following 300-FF-2 Waste Sites (300-259, 303-M SA, 303-M UOF, UPR-300-46, URP-300-17, and 618-1) and Confirmatory Sampling of the Following 300-FF-2 Candidate Sites (300-109, 300-110, and 333 ESHWSA) | 11/30/03 | 11/30/03 (F) |
| M-94-01 | Submit a Schedule and TPA Milestones to Complete Disposition of the Following Surplus Facilities: 303M, 332, 333, 334, 334A, 3221, 3222, 3223, 324, 3225, 324, 324B, 327 (River Corridor scope currently maintained by FH) | 11/30/03 | 11/30/03 (F) |
| M-16-03H | Complete Remediation of Waste Sites in 300-FF-1 Operable Unit to Include Excavation, Verification, and Regrading, Including the 618-4 Burial Ground in Accordance with an Approved RDR/ RAWP | 12/31/03 | 12/31/03 (F) |

PERFORMANCE OBJECTIVES



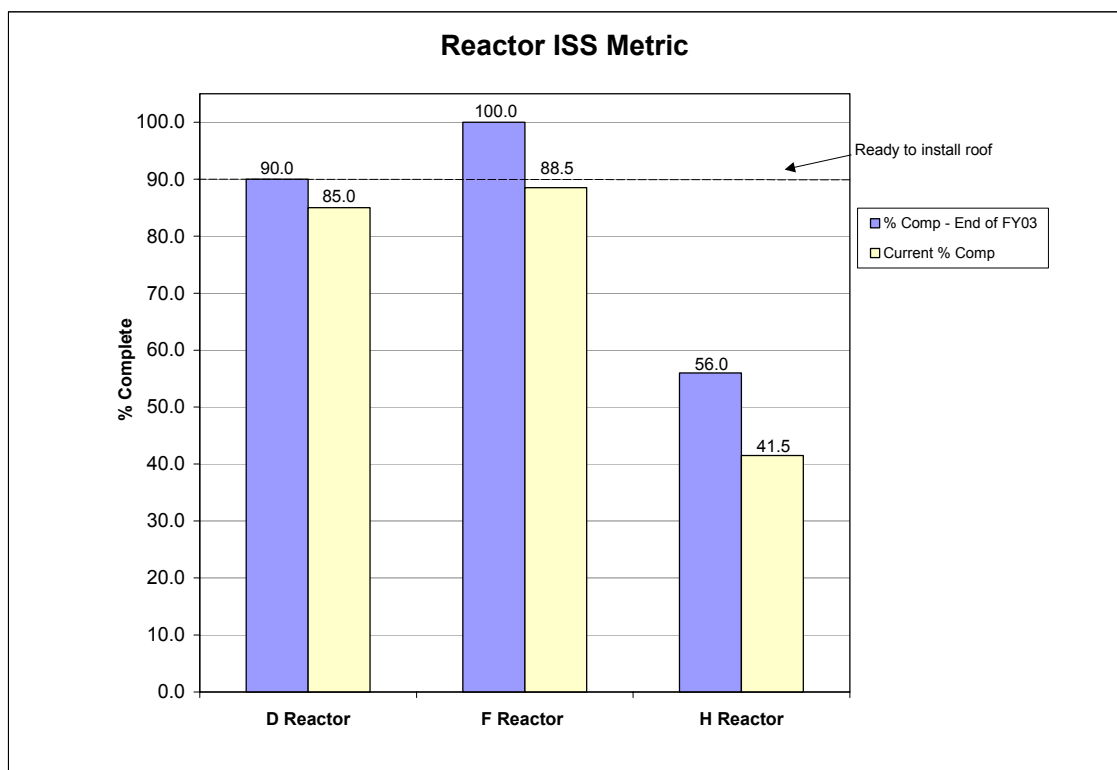
| PI | Task |
|-------------------------------------|---|
| Reactor Interim Safe Storage | Complete FY02 carryover ISS activities at F Reactor by November 20, 2002. Status: Completed on November 13. |

ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

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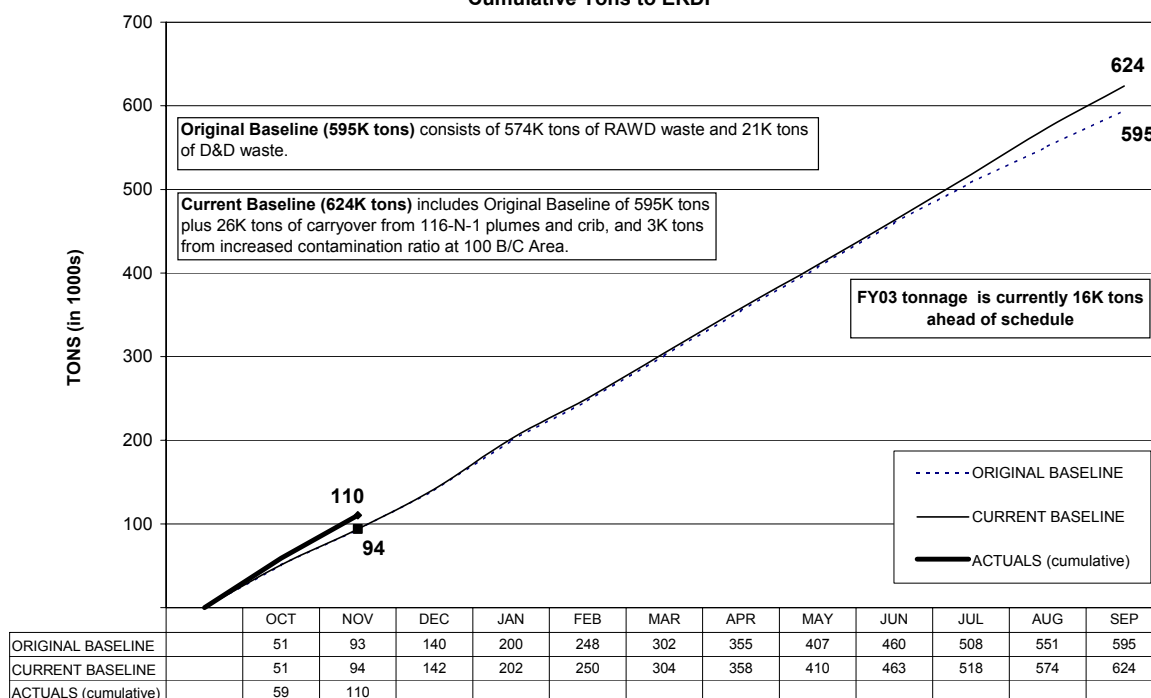
NOVEMBER 2002

PERFORMANCE MEASURES/METRICS



Remedial Action Metric

Cumulative Tons to ERDF

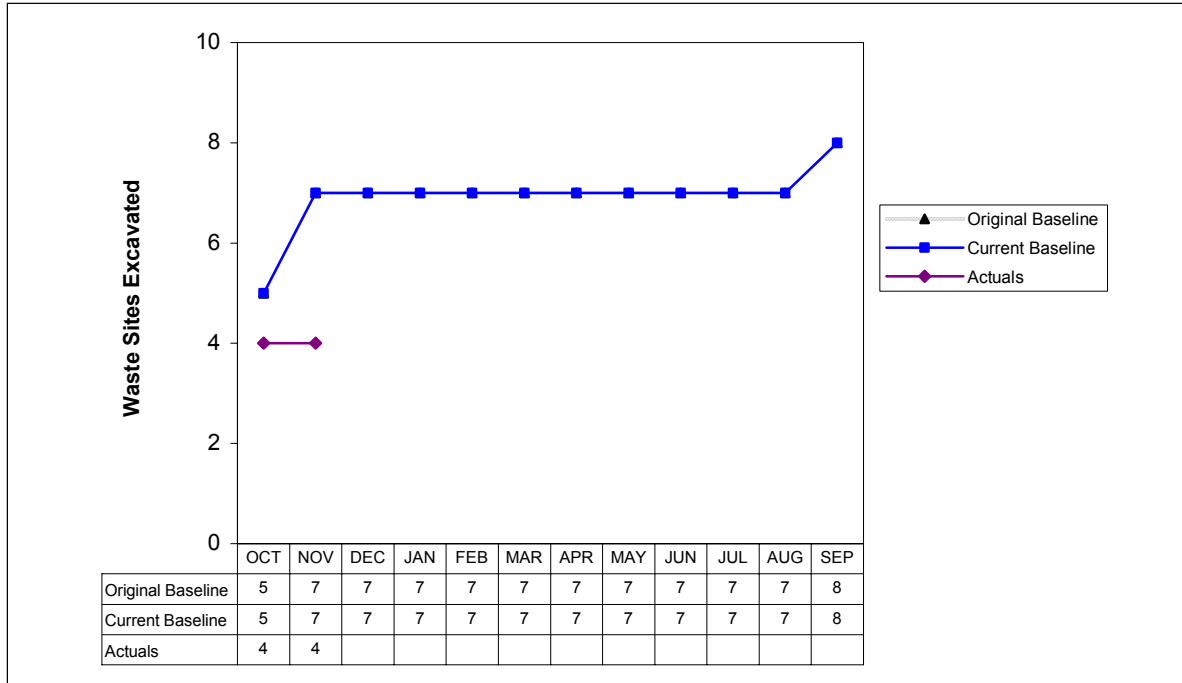


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PERFORMANCE MEASURES/METRICS (continued)

Waste Site Metric

Excavations Completed
(cumulative)



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COST/SCHEDULE STATUS

Schedule:

| River Corridor Restoration | BCWS | BCWP | Variance |
|--|---------------|---------------|--------------|
| | \$K | \$K | \$K |
| RC01 100 Area River Corridor Cleanup | 10,846 | 10,595 | (251) |
| RC02 300 Area Cleanup | 1,631 | 3,004 | 1,373 |
| RC05 River Corridor Waste Management | 5,182 | 5,580 | 398 |
| TOTAL River Corridor Restoration: | 17,659 | 19,179 | 1,520 |

PBS-RC01 – 100 Area River Corridor Cleanup

Schedule Variance = **(\$251K); (2.3%)**

Cause: Suspension of work activities at 116-N-1 crib, pipelines, and UPR-100-N-31.

Resolution: Scope is being analyzed for safe path forward with airborne contamination control and asbestos abatement plan. A BCP is being processed to reflect path forward.

Cause: Fewer quantities than planned required remediation at Lewis Canal due to waste minimization efforts.

Resolution: A BCP is being prepared to reflect waste minimization reductions in 100 F Area baseline.

PBS-RC02 – 300 Area Cleanup

Schedule Variance = **\$1,373K; 84.2%**

Cause: 618-5 Burial Ground remediation accelerated by two months.

Resolution: N/A

PBS-RC05 – River Corridor Waste Management

Schedule Variance = **\$398K; 7.7%**

Cause: More LDR soil treated than planned; waste disposal ahead of plan by 16K tons.

Resolution: N/A

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COST/SCHEDULE STATUS (continued)

Cost:

| River Corridor Restoration | FY03 EAC | BCWP | ACWP | Variance |
|---|-----------------|---------------|---------------|-----------------|
| | \$K | \$K | \$K | \$K |
| RC01 100 Area River Corridor Cleanup | 66,852 | 10,595 | 9,761 | 834 |
| RC02 300 Area Cleanup | 12,769 | 3,004 | 2,142 | 862 |
| RC05 River Corridor Waste Management | 32,897 | 5,580 | 4,983 | 597 |
| TOTAL River Corridor Restoration: | 112,518 | 19,179 | 16,886 | 2,293 |

PBS-RC01 – 100 Area River Corridor Cleanup

Cost Variance = **\$834K; 7.9%**

Cause: F Reactor FSB floor demolition and loadout efficiencies; fewer H Reactor hot spots encountered to date than planned.

Resolution: Underrun reflected in EAC.

Cause: Fewer hours utilized on safety analysis reports (SARs) than planned.

Resolution: Underrun reflected in EAC.

PBS-RC02 – 300 Area Cleanup

Cost Variance = **\$862K; 28.7%**

Cause: Efficiencies realized in 618-4 Burial Ground sorting, sampling, and loadout of contaminated soils; overlapping of 618-4 and 618-5 Burial Ground remediation operations.

Resolution: Underrun reflected in EAC.

PBS-RC05 – River Corridor Waste Management

Cost Variance = **\$597K; 10.7%**

Cause: LDR lead soil treatment costs less than planned; LDR treatment and waste disposal were overaccrued in September resulting in a FY03 credit.

Resolution: Underrun reflected in EAC.

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ISSUES (REGULATORY/EXTERNAL/DOE)

- **100 N Area Remediation:** Results of residual radioactivity (RESRAD) modeling performed for the 116-N-1 crib and trench indicate that the site will not attain groundwater remedial action objectives (RAOs) following excavation. The results indicate that the lowest vadose zone layer contributes contaminants at levels above the RAOs.

Status: Regulators and stakeholders provided input on the proposed Explanation of Significant Difference (ESD) for 116-N-1 site closeout during the Hanford Advisory Board (HAB) River and Plateau Committee meeting held on November 14. The following three actions resulted: 1) extend the ESD schedule to allow EPA legal review, especially considering the first-time use of balancing factors, 2) update the ESD to include other alternatives considered and cost information, and 3) provide an integrated soil and groundwater presentation at the January HAB committee meeting. Strategy meetings are planned with the regulators prior to the January meeting. The presentation to the committee will be coordinated with FH, which is presenting the groundwater portion. It is not certain whether a full HAB advice is expected, and whether it will affect the ESD schedule. The ESD is scheduled for regulatory review starting December 15, with public comment expected to begin the end of January.

- **300-FF-1 Regrading:** Endorsement of the 300-FF-1 operable unit regrading plan needs to be obtained from RL and EPA to support completion of Tri-Party Agreement Milestone M-16-03H, "Complete Remediation of Waste Sites in 300-FF-1 Operable Unit to Include Excavation, Verification, and Regrading, Including the 618-4 Burial Ground in Accordance with an Approved RDR/RAWP", due December 31, 2003.

Status: RL has sent a letter to EPA stating further evaluation is required for 300-FF-1 end state. Meetings are planned during January to determine outcome.

INTEGRATION ACTIVITIES

ERC Emergency Preparedness supported the Hanford Site FY03 first quarter limited exercise on November 21, with controllers and evaluators, as well as responders to the Emergency Operations Center.